Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. A clean version of the Claims, as amended hereby, is appended to this paper for the Examiner's convenience:

Listing of Claims:

1. (Currently amended) A method of processing historical data relating to past ~~historical~~ performance ~~series (A1, A2, ..., Am)~~ of markets and financial ~~and/financial~~ tools in order to obtain a synthetic index ~~(PROXYNTETICA)~~ constituted by a series of performances ~~(Ax1, Ax2, ..., Axn)~~ representative of various economical and financial scenarios, the method comprising~~where the method comprises the following steps~~:

- acquiring historical data relating to a number (m) of historical series of[[m]] performances (A1, A2, ..., Am);~~,~~;
- setting up a given number (n) ~~representing the number~~ of performances (Ax1, Ax2, ..., Axn) to be produced, wherein the given number (n) of performances ~~for constituting~~ constitutes the synthetic index (PROXYNTETICA)~~,~~;
- setting up a first number of probability levels ~~(Pmin, Pmin and 50%)~~ to utilize for defining at least one control system ~~systems~~ and a second number of probability levels ~~(Pinf, P sup and 10 50%)~~ to utilize for defining at least one statistical scenario ~~scenarios~~,;
- setting up a given number (s) of time intervals (T1, T2, ..., Ts) including [[the]] a time interval (T*) equal to the given number (n) of performances, in which particular mathematical constraints are ~~to be~~ verified between [[the]] curves [[of]] generated by the at least one control system, wherein the curves are originated by the given number (n) of performances (Ax1, Ax2, ..., Axn) of the synthetic index ([[p]]PROXYNTETICA) and [[the]] by the at least one statistical scenario ~~scenarios~~ obtained from the ~~given~~ number (m) of historical series of performances ~~series~~ (A1, A2, ..., Am)~~,~~;
- calculating a plurality ~~number~~ of statistical scenarios [[{]](Scenario (Pi, T[[J]]j)) constructed in accordance with said second number of probability levels and the given number (s) of time intervals, wherein in a first statistical scenario (Pi) i $\in$ [1...p] and in a second statistical scenario (Tj) [[j]] $\in$ [1...s]~~,~~;
- setting up a growing series of correlation values;;

- selecting a non-linear programming algorithm for identifying [[the]] global optima~~,~~;

- configuring ~~setting up~~ said non-linear programming algorithm so that it ~~the same~~:

a) assumes the given number (n) of performances (Ax1, Ax2, ..., Axn) [[as]] ~~the unknown variables to be produced~~ [[for]]to be ~~constituting~~ the synthetic index ([[p]]PROXYNTETICA), and

b) performs at least one of minimizing and maximizing an ~~minimizes and/or maximizes a~~ objective function (FO), wherein the objective function is obtained as a standard logarithmic deviation from the given number (n) of performances ~~unknown variables~~ (Ax1, Ax2, ..., Axn)~~,~~; [[and]]

- establishing ~~setting up~~ constraints for the non-linear programming algorithm ~~implementing process~~, so that said non-linear programming algorithm calculates the given number (n) of performances ~~unknown variables~~ (Ax1, Ax2, ..., Axn) [[for]]to arrive at at least one of a minimum synthetic index (PROXYNTETICA min) and[[/or]] a maximum synthetic index (~~PROXYNTETICA min and/or~~ PROXYNTETICA max)[[.]]; and

- processing the non-linear programming algorithm so that it provides at least one of the maximum synthetic index (PROXYNTETICA max) and the minimum synthetic index (PROXYNTETICA min).

2. (Currently amended) The method according to claim 1, wherein ~~characterized in that~~ said first number of probability levels comprises ~~for defining control systems is constituted of~~ three probability levels, the first probability level ~~(Pmin, Pmin and 50%)~~ comprising an average probability level equal to 50%, the second probability level comprising a minimum probability level (Pmin) of less than ~~<~~ 50%, and the third probability level comprising a maximum probability level (Pmax) of greater than ~~>~~ 50%.

3. (Currently amended) The method according to claim 1, wherein ~~characterized in that~~ said second number of probability levels comprises ~~for defining statistical scenarios is constituted of~~ three probability levels, the first probability level ~~(Pinf, Psup and 50%)~~ comprising an average probability level equal to 50%, the second probability level comprising a lower probability level

(Pinf) of less than ~~<~~ 50%, and the third probability level comprising a higher probability level (Psup) of greater than ~~>~~ 50%.

4. (Currently amended) The method according to claim 3, wherein ~~characterized in that~~ said number of statistical scenarios (Scenario ([[p]]Pi, Tj)) comprises ~~is equal to~~ three statistical scenarios constructed in accordance with [[to]] said three probability levels ~~of probability~~ (Pinf, Psup and 50%).

5. (Currently amended) The method according to claim 1, wherein ~~characterized in that~~ said constraints set up for the non-linear programming ~~imposed on said~~ algorithm to arrive at ~~for calculating~~ the minimum synthetic index ([[p]]PROXYNTETICA min) comprise ~~that~~:

a) [[the]]a standard deviation [[DS]] of the given number (n) of performances ~~problem variables~~ (Ax1, Ax2, ..., Axn) that is ~~to be~~ greater than or equal to the average [[M]] of ~~the~~ standard deviations [[DSk,]] calculated on [[the]] a rolling calculation of ~~grade n of~~ the ~~given~~ historical series of performances (A1 A2, ..., Am), wherein the rolling calculation is equal in number to the given number (n) of performances~~;~~;

b) the value of the control system ~~at the probability of 50% (Pmed)~~ that is constructed on the given number (n) of performances ~~problem variables~~ (Ax1, Ax2, ..., Axn) is defined utilizing a probability level equal to 50% and coincides ~~is to coincide~~ with the value of [[the]] a statistical scenario that is calculated on the ~~given~~ number (m) of historical series of performances (A1 A2, ..., Am)[[,]] at a [[the]] probability level equal to [[of]] 50% (Pmed), wherein both the control system and the statistical scenario relate ~~relating~~ to [[the]] a [[n-th]] time interval equal to the total given number (n) of performances~~;~~;

c) the values of the control systems defined for the given number (n) of performances ~~of the problem variables~~ (Ax1, Ax2, ..., Axn) having a given number ~~corresponding to the~~ (s) of time intervals and ~~to the maximum~~ probability levels comprising a maximum probability level (Pmax) of greater than 50% have values that are ~~to be~~ lower than or coincident with [[the]] corresponding values of the statistical scenarios ~~scenario~~ calculated on the ~~given~~ number (m) of historical series of performances (A1 A2, ..., Am) that have probability levels comprising a higher ~~relating to the highest~~ probability level (Psup) of greater than 50%~~;~~;

d) the values of the control systems that are defined for the given number (n) of performances ~~of the problem variables~~ (Ax1, Ax2, ..., Axn) having a given number ~~corresponding to the~~ (s) of time intervals and ~~to the minimum~~ probability levels comprising a minimum probability level (Pmin) of less than 50% have values that are ~~to be~~ higher than or coincident with [[the]] corresponding values of the statistical scenarios ~~scenario~~ calculated on the ~~given~~ number (m) of historical series of performances (A1 A2, ..., Am) that have probability levels comprising a lower ~~relating to the lowest~~ probability level (Pinf) of less than 50%.; and

e) the correlation between: (i) the given number (n) of performances ~~problem variables~~ (Ax1, Ax2, ..., Axn); and (ii) the last [[n]] portion of performances of the ~~given~~ number (m) of historical series of performances (A1 A2, ..., Am) equal in number to the given number (n) of performances; is ~~to be~~ equal to the highest possible value ~~among those~~ given ~~for the correlation~~.

6. (Currently amended) The method according to claim 1, wherein ~~characterized in that~~ said constraints set up for the non-linear programming ~~imposed on said~~ algorithm to arrive at ~~for calculating~~ the maximum synthetic index (PROXYNTETICA max) comprise ~~that~~:

a) the value of the control system ~~at the probability of 50% (Pmed)~~ that is constructed on the given number (n) of performances ~~problem variables~~ (Ax1, Ax2, ..., Axn) is defined utilizing a probability level equal to 50% and coincides ~~is to coincide~~ with the value of [[the]] a statistical scenario that is calculated on the ~~given~~ number (m) of performances (A1 A2, ..., Am)[[,]] at a [[the]] probability level equal to [[of]] 50% (Pmed), wherein both the control system and the statistical scenario relate ~~relating~~ to the time interval (T*) equal to the number (n) of performances.;

b) the ~~values of~~ control systems defined for the given number (n) of performances ~~of the problem variables~~ (Ax1, Ax2, ..., Axn) having a given number ~~corresponding to the~~ (s) of time intervals and ~~to the maximum~~ probability levels comprising a maximum probability level (Pmax) of greater than 50% are ~~to be~~ higher than or coincident with [[the]] corresponding values of the statistical scenarios ~~scenario~~ calculated on the ~~given~~ number (m) of historical series of performances (A1 A2, ..., Am) that have probability levels comprising a higher ~~relating to the highest~~ probability level (Psup) of greater than 50%.;

c) the values of the control systems that are defined for the given number (n) of performances ~~of the problem variables~~ (Ax1, Ax2, ..., Axn) having a given number ~~corresponding to the~~ (s) of time intervals and ~~to the minimum~~ probability levels comprising a minimum probability level (Pmin) of less than 50% are ~~to be~~ lower than or coincident with [[the]] corresponding values of the statistical scenarios ~~scenario~~ calculated on the ~~given~~ number (m) of historical series of performances (A1 A2, ..., Am) that have probability levels comprising a lower~~, relating to the lowest~~ probability level (Pinf) of less than 50%~~.~~; and

d) the correlation between: (i) the given number (n) of performances ~~problem variables~~ (Ax1, Ax2, ..., Axn); and (ii) the last [[n]] portion of performances of the ~~given~~ number (m) of historical series of performances (A1 A2, ..., Am) equal in number to the given number (n) of performances; is [[be]] equal to the highest possible value ~~among those~~ given ~~for the correlation~~.

7. (Currently amended) The method according to claim 5, wherein ~~characterized in that~~ at each processing of said non-linear programming algorithm where an unacceptable ~~supplying a~~ solution is provided ~~unacceptable~~ under the constraint (e) ~~regarding the correlation between the n problem variables (Ax1, Ax2, ..., Axn) and the last n performances of the given historical series (A1 A2, ..., Am)~~, the ~~first~~ value of correlation considered is [[the]] one less ~~lower~~ than the highest ~~current~~ value given.

8. (Currently amended) The method according to claim 1, wherein ~~characterized in that~~ said non-linear programming algorithm for identifying [[the]] global optima is an algorithm implemented in the GLOBSOL software.